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In addition to a "clean" version of the specification as amended, a copy of the specification which is marked up to show the specific changes made is also enclosed herewith.

Also enclosed is a corrected translation of the priority International application, responsive to the Notification of a Defective Response mailed July 27, 2001, wherein it was observed that the claims were not correctly translated in the translation submitted July 16, 2001. A marked-up version of the corrected translation is also enclosed.

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IN THE CLAIMS:

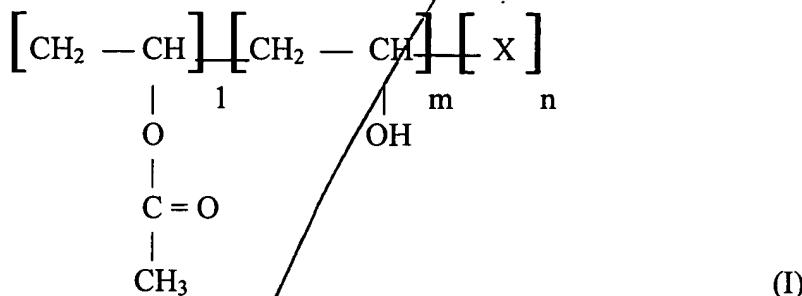
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Amend claim 1 to read as follows:

1. (Amended) A hydrophilization agent for metallic material, comprising:
- (A) a hydrophilic polymer having at least one non-ionic functional group selected from the group consisting of primary amide groups, secondary amide groups, tertiary amide groups, hydroxyl groups and polyoxyalkylene groups;
- (B) a hydrophilic polymer having at least one ionic functional group selected from the group consisting of sulfonic acid groups, phosphonic acid groups, carboxyl groups, primary amino groups, secondary amino groups, tertiary amino groups, and quaternary ammonium groups;
- (C) a vanadium compound; and
- (D) a compound containing at least one element selected from the group consisting of Zr, Ti, and Si.
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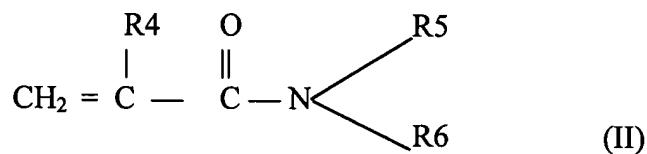
Enter the following new claims 10-34:

10. (New) A hydrophilization agent according to claim 1 wherein component (A) comprises at least one member selected from the group consisting of polyvinyl alcohol polymers of general formula I



and reaction products of the polyvinyl alcohol polymers of general formula I and diketenes, wherein X is a copolymerizing unit other than vinyl acetate and vinyl alcohol, 1 is the copolymerizing number of moles of a vinyl acetate copolymerizing unit, m is the copolymerizing number of moles of a vinyl alcohol polymerizing unit, and n is the copolymerizing number of moles of copolymerizing unit X, and 1 and n may be zero.

11. (New) A hydrophilization agent according to claim 1, wherein said component (A) comprises at least one acrylamide polymer selected from the group consisting of water-soluble polymers and water-soluble copolymers of an acrylamide compound of general formula II:



wherein R4 is a hydrogen atom or a CH<sub>3</sub> group, and R5 and R6 are, independently of the other, a hydrogen atom, a C1-C4 alkyl group, a benzil group, or a C1-C3 hydroxyalkyl group.

12. (New) A hydrophilization agent according to claim 1, additionally comprising at least one additive selected from the group consisting of water, rust preventives, leveling agents, fillers, coloring agents, water-soluble solvents, anti-bacteria/mildew agents, organic crosslinking agents and surfactants.
13. (New) A hydrophilization agent according to claim 1 comprising:
- (i) 100 parts by weight component (A);
  - (ii) 0.1 to 1000 parts by weight component (B);
  - (iii) 0.1 to 200 parts by weight component (C); and
  - (iv) 0.1 to 200 parts by weight component (D).
14. (New) A method of treating a surface of a metallic material comprising depositing the hydrophilization agent of claim 1 on said surface and drying the hydrophilization agent deposited on said surface to form a hydrophilic film.
15. (New) A metallic material having a surface with a hydrophilic film thereon, said hydrophilic film being formed by the method of claim 14.
16. (New) The metallic material according to claim 15 wherein said metallic material is a heat exchanger.
17. (New) A hydrophilization agent according to claim 1 comprising:
- (i) 100 parts by weight component (A);
  - (ii) 1 to 100 parts by weight component (B);
  - (iii) 1 to 100 parts by weight component (C); and

- (iv) 1 to 100 parts by weight component (D).
18. (New) A hydrophilization agent according to claim 1 comprising solvent and:
- (i) 0.05 to 50 g/L of component (A);
  - (ii) 0.05 to 50 g/L of component (B);
  - (iii) 0.05 to 10 g/L of component (C); and
  - (iv) 0.05 to 10 g/L of component (D).
19. (New) A hydrophilization agent according to claim 1 comprising water and:
- (i) 0.5 to 10 g/L of component (A);
  - (ii) 0.5 to 10 g/L of component (B);
  - (iii) 0.5 to 5 g/L of component (C); and
  - (iv) 0.5 to 5 g/L of component (D).
20. (New) A hydrophilization agent in accordance with claim 10 wherein component (A) comprises at least one polyvinyl alcohol polymer of general formula I wherein copolymerizing unit X has a copolymerizing mole ratio  $n/1+m+n$  from 0 to 0.4.
21. (New) A hydrophilization agent in accordance with claim 10 wherein component (A) comprises at least one polyvinyl alcohol polymer of general formula I wherein the vinyl acetate polymerizing unit has a copolymerizing mole ratio  $1/1+m+n$  from 0 to 0.2.
22. (New) A hydrophilization agent in accordance with claim 11 wherein component (B) comprises at least one acrylamide polymer which does not have a cationic group but which does have at least one ionic functional group selected from the

group consisting of sulfonic acid groups, phosphonic acid groups, and carboxyl groups.

23. (New) A hydrophilization agent in accordance with claim 11 wherein component (B) comprises at least one acrylamide polymer which does not have an anionic group but which does have at least one member selected from the group consisting of primary amino groups, secondary amino groups, tertiary amino groups and quaternary ammonium groups.
24. (New) A hydrophilization agent in accordance with claim 1 wherein component (D) is water-soluble or water-dispersible.
25. (New) A hydrophilization agent obtained by combining with a solvent the following components:
- (A) a hydrophilic polymer having at least one functional group selected from the group consisting of primary amide groups, secondary amide groups, tertiary amide groups, hydroxyl groups and polyoxyalkylene groups;
- (B) a hydrophilic polymer having at least one ionic functional group selected from the group consisting of sulfonic acid groups, phosphonic acid groups, carboxyl groups, primary amino groups, secondary amino groups, tertiary amino groups and quaternary ammonium groups;
- (C) a vanadium compound; and
- (D) a compound containing at least one element selected from the group consisting of Zr, Ti and Si.
26. (New) A hydrophilization agent in accordance with claim 25 wherein said solvent comprises water.

27. (New) A hydrophilization agent in accordance with claim 25 comprising:
- (i) 0.05 to 50 g/L of component (A);
  - (ii) 0.05 to 50 g/L of component (B);
  - (iii) 0.05 to 10 g/L of component (C); and
  - (iv) 0.05 to 10 g/L of component (D).
28. (New) A method in accordance with claim 14 wherein said surface is degreased prior to said depositing.
29. (New) A method in accordance with claim 14 wherein said surface is pre-treated by chemical conversion prior to said depositing.
30. (New) A method in accordance with claim 14 wherein said hydrophilic film has a thickness of from 0.05  $\mu\text{m}$  to 5  $\mu\text{m}$ .
- A ✓  
31. (New) A metallic material having a surface with a hydrophilic film thereon, said hydrophilic film comprising:
  - (A) a hydrophilic polymer having at least one functional group selected from the group consisting of primary amide groups, secondary amide groups, tertiary amide groups, hydroxyl groups and polyoxyalkylene groups;
  - (B) a hydrophilic polymer having at least one ionic functional group selected from the group consisting of sulfonic acid groups, phosphonic acid groups, carboxyl groups, primary amino groups, secondary amino groups, tertiary amino groups and quaternary ammonium groups;
  - (C) a vanadium compound; and
  - (D) a compound containing at least one element selected from the group consisting of Zr, Ti and Si.
- B ✓

32. (New) A metallic material in accordance with claim 31, wherein said metallic material is a heat exchanger.
33. (New) A metallic material in accordance with claim 31, wherein said film has a thickness of from 0.05  $\mu\text{m}$  to 5  $\mu\text{m}$ .
34. (New) A metallic material in accordance with claim 31, wherein said film comprises:

- Cont*
- A 2
- (i) 100 parts by weight of component (A);
  - (ii) 0.1 to 1000 parts by weight of component (B);
  - (iii) 0.1 to 200 parts by weight of component (C); and
  - (iv) 0.1 to 200 parts by weight of component (D).

REMARKS

Claims 1 and 10-34 are now pending in the application, claims 2-9 having been earlier canceled. The amendments to claim 1 are shown in the separately attached substitute specification entitled "Version Marked to Show Changes Made."

Respectfully submitted,

  
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